

## Office Memorandum • UNITED STATES GOVERNMENT

TO : File

DATE: 18 December 1951

FROM :  A

SUBJECT: Carbon Dioxide Therapy, Possible "Artichoke" Use

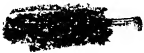
1. Reference is made to a book entitled CARBON DIOXIDE THERAPY by L. J. Meduna, M. D., Professor of Psychiatry, University of Illinois College of Medicine, Chicago, Illinois.


2. This book sets forth the treatment of certain types of nervous disorders or psychopathic conditions by the use of carbon dioxide (CO<sub>2</sub>) mixed with oxygen. Dr. Meduna has set forth in this book his techniques in the administration of carbon dioxide treatment on certain types of mental patients and, in general, it may be stated that he uses, for medical purposes, 30% CO<sub>2</sub> mixed with 70% oxygen. Dr. Meduna uses this mixture by straight commercial purchase of the mixed gas in Chicago which he buys for approximately \$9.75 a tank full. This gas comes in tanks which contain 1400 gallons of gas under about 1800 pounds pressure and is delivered to the patients through two manometers into a standard breathing bag, gas inhaling device.

3. According to Dr. Meduna, the inhalation of this mixture rapidly induces unconsciousness in a patient. This is held for a matter of a few seconds when the mask is removed and the patient then regains full consciousness through a so called "transitional" period. Apparently during this transitional period, Dr. Meduna questions the patient and also at this time the patients talk over or tell about their experiences in the sense of a psychiatric treatment.



4. This book indicates that by the use of a CO<sub>2</sub> dosage, many individuals have talked at great lengths of their past, revealed intimate secrets, abreacted, etc., etc. and because of this, Dr. Meduna has apparently achieved some excellent results in treating certain mental conditions.

5. Although CO<sub>2</sub> treatments apparently produce intense dreams, hallucinations to a certain extent and a desire and willingness to talk, the writer is doubtful if this CO<sub>2</sub> treatment could be applied to "Artichoke" unless it was applied after the individual had been rendered unconscious, since the treatment involves the use of a gas mask and cumbersome equipment. However, it might be of interest to examine this technique with the view toward filling an air-proof room with a similar gas mixture (30% CO<sub>2</sub>--70% oxygen).



 6. The book does not indicate any extensive use of hypnosis or auto-suggestion in connection with the CO2 treatments or the use of CO2 as a means of gaining hypnotic control.

7. In connection with the above, it might be possible to have CO2 experiments conducted along with experiments on low oxygen content or high and low pressures in airtight rooms.

A 8. It is suggested that the above information be made available to the medical staff (perhaps  or to  for a future discussion with medical or psychiatric consultants of this Agency.

9. The book, CARBON DIOXIDE THERAPY, apparently came from the Army Medical Library at Washington, D. C., and the library number is QV 314 M493C 1950.

A 